

## **ABSTRACT OF THE DISCLOSURE**

**[0049]** An apparatus for treatment of a waste gas, containing fluorine-containing compounds, comprises: a solids treating device for separating solids from the waste gas; an addition device for adding  $H_2$  and/or  $H_2O$ , or  $H_2$  and/or  $H_2O$  and  $O_2$ , as a decomposition assist gas to the waste gas leaving the solids treating device; a thermal decomposition device that is packed with  $\gamma$ -alumina heated at 600 - 900°C, and which thermally decomposes the waste gas to which the decomposition assist gas has been added; an acidic gas treating device for removing acidic gases from the thermally decomposed waste gas; and channels or lines for connecting these devices in sequence. The apparatus preferably includes an air ejector which is capable of adjusting an internal pressure of the apparatus.